DOCUMENT RESUME

ED 119 257 CS 501 244

AUTHOR Jandt, Fred E.
TITLE Relationships between Verbalizations and Self Concept among Upward Bound Students as Shown through Computer-Assisted Content Analysis.
PUB DATE 74
NOTE 11p.; Paper presented at the Annual Meeting of the International Communication Association (New Orleans, April 17-20, 1974)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage
DESCRIPTORS *Computer Programs; *Content Analysis; Disadvantaged Youth; Educational Research; Higher Education; *Language Usage; *Oral Communication; *Self Concept; Speech; Verbal Communication
IDENTIFIERS *Project Upward Bound

ABSTRACT

The purpose of this study was to examine the relationships between self concept and communicative behavior of Upward Bound students as shown through computer-assisted content analysis. Nineteen Upward Bound students at Bowling Green State University during the summer of 1971 composed the population for this study. The methodology used in this study was successful in extracting an indication of self concept from verbal communicative behavior. Upward Bound students were shown through their verbalizations to reflect a self concept consistent with what might be hypothesized upon the basis of their known environmental and social backgrounds. (RB)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED119257

RELATIONSHIPS BETWEEN VERBALIZATIONS AND SELF CONCEPT AMONG UPWARD BOUND STUDENTS AS SHOWN THROUGH COMPUTER-ASSISTED CONTENT ANALYSIS*

Fred E. Jandt
Associate Professor of Speech Communication
State University College
Brockport, New York 14420

*This is an expanded version of a paper presented at the annual convention of the International Communication Association in New Orleans, April 17-20, 1974. The author wishes to acknowledge the assistance of Dr. Thomas Jonas, Department of Speech, University of Wisconsin, Platteville.

CS 501 244

Theory supports the hypothesis of a relationship between self concept and communicative behavior. This relationship may be conceptualized as a system in which self concept is formed through interaction (Cooley and Mead) and in which behavior is, to some extent, determined by self concept (Maslow and Rogers), or, more explicitly, in which interpersonal behavior is, to some extent, determined by self concept (Newcomb and Leary).[1] The purposes of this study were to examine the relationships between self concept and communicative behavior of a demographically definable sub-group, i.e. Upward Bound students, and to extend the uses of the computer-assisted content analysis program WORDS to multiple speakers.

BACKGROUND

Upward Bound, a program established in 1965 by the Office of Economic Opportunity, was generally designed to provide students with summer training in preparation for college level work.[2] In excess of ninety percent of the students selected for the program were below poverty guidelines established to determine eligibility. Upward Bound programs have been open to all races as the criterion for selection has been demonstrated to have been economic disadvantage. However it is naive to assume that the poor in America are representative of the total population. In 1960 the median family income for the white population was $5,835, for the non-white population $3,233; in 1964 the family income for the white population had risen to $6,858, for the non-white population $3,839. In 1964, 92% of the non-white population were Negroes.[3]

As it can be said that most interpersonal behavior is derived to a significant degree from the socialization experiences of the individual, then also do economic conditions affect the socialization process. Economic conditions, for example, have been shown to affect IQ. A number of studies show a decrease in IQ for black children with advancing age. However, as Pettigrew has pointed out

"environmentally-deprived Caucasian groups reveal precisely the same phenomenon."[5] It has even been suggested that in economically deprived families, black mothers are frequently punitive and cruel to their sons as a means of creating an adult who can survive in a hostile world.[6] The much-aligned Rosenthal and Jacobson studies offer to some a partial nongenetic explanation for low scholastic performance of disadvantaged children.[7]

Some investigators have attempted to explore the self concepts of groups which may be assumed to be economically deprived. Dreger and Miller,[8] Hokanson,[9] McDonald and Gynther,[10] and Soares and Soares[11] are examples. An entire issue of the Journal of Social Issues was devoted to the topic of Negro personality.[12] Baughman has presented an excellent discussion and literature review on black self esteem.[13] However in the interpretation of these results, the assertion of Grier and Cobbs must be kept in mind that certain traits exhibited by blacks and judged by whites to be psychopathological may also be thought of as "adaptive devices" to be judged against what they call the Black Norm.[14]

It has been demonstrated that communication behavior is related to one's social condition. Two white psychiatrists practicing in the South used black observers to collect samples of jokes told by blacks to blacks. Their data showed the verbal communicative behavior of joking to be predominantly about race relationships.[15]

ANALYSIS OF VERBAL BEHAVIOR

The general purpose of this study, then, was to examine the relationships between self concept and communicative behavior of Upward Bound students as shown through computer-assisted content analysis. Many content analysis procedures are in frequent use today; many of these are computerized for speed

in data analysis. Generally, content analysis procedures require that the researcher impose upon his data a set of "tags" or categories into which words, phrases, concepts, etc. are sorted. This procedure does impose an experimenter bias through the experimenter's selection of a particular set of categories through which the data is seen. One more useful procedure which is not subject to this criticism is WORDS developed by Howard P. Iker of the University of Rochester.[16]

WORDS developed out of a research need in psychotherapy to describe the content of the therapist-client encounter. To simply ask independent judges to describe the content of an encounter has inherently low reliability because each judge will bring to the situation his own perceptions and experiences. The WORDS system allows the computer to generate the content themes based upon the logic that if an individual uses particular words in close continguity, then the meaning of each word is dependent upon that continguity. For example, a traditional content analysis system might include the tag "family" requiring that the words "brother" and "sister" be categorized under that tag. Iker's WORDS system, however, would categorize the word "brother" with those that occur in continguous relationship to it. Thus, "sister" may or may not be classified with "brother;" it would if the words "brother" and "sister" frequently occurred near together in the protocol of the discourse under analysis.

Specifically, the number of times a word appears in a segment of the protocol is counted. Then, correlation coefficients are computed as the measure of the extent to which words share a continguous relationship. Then, a principal components analysis and factor scoring are performed. As the final step, the researcher labels the resulting categories thus leaving the subjective judgments out of the data analysis.

PROCEDURE

The Upward Bound "Bridge"[17] students at Bowling Green State University during the summer of 1971 composed the population for this study. The class was told by their instructor to report to a certain room at a designated day and time for an interview. Nineteen students reported.

The students reported to an experimental laboratory equipped with one-way mirrors and hidden microphones to permit undisturbed observation and audio recording. Each student was met by a confederate who conducted the interview. The confederate first introduced himself to each student and explained that in this interview he would read the beginning of seven sentences. The student was asked to complete those sentences in any way he/she choose.

The seven sentence beginnings read to each student were based upon Berger's seven definitions of acceptance of others.[18] The students' responses were recorded, transcribed, and submitted to WORDS analysis using a version of the system at Bowling Green State University.

RESULTS

The data were input marked as seven segments and calling for seven factors since there were seven sentence completions for each subject. In the logic of the program, what was input was seven segments of one speaker's protocol or an N of 7. Due to the small N, several 1.0 or perfect correlations occurred and all variance was extracted in six factors. These results, while interesting, were somewhat unexpected so the original data was given to the developer of the program and additional runs were performed under his direction with his most up-to-date programs at the University of Rochester.

Under Iker's direction, artificial words were created of words with perfect or near perfect correlations. Further, the number of observations was doubled by

increasing the number of segments to fourteen. In this manner, thirteen factors were extracted.

Words with factor loadings greater than .600 from the first factor in this analysis are shown in Table I.

TABLE I

FACTOR I

WORD	LOADING
awwhipreprejion (artificial word composed of awful, white, prejudice, prejudiced, and religion)	-.995
same	-.975
black	-.910
chance	-.872
any	-.858
live	-.851
differ	-.846
answer	-.843
year	-.827
all	-.826
find	-.822
understand	-.783
person	-.737
no	-.730
ah	-.710
little	-.705
boundupwd (artificial word composed of Bound and Upward)	-.699
anyway	-.698

TABLE I continued

WORD	LOADING
sorttend (artificial word composed of sort and tend)	-.692
concern	-.679
influkidset (artificial word composed of influence, kid, and set)	-.678
social	-.673
comment	-.663
agreehard (artificial word composed of agree and hard)	-.657
individual	-.656
character	-.635
accept	-.634
hum	-.632
equal	-.628
get	-.623

NOTE: The highest positive loadings were: well .387, else .288, anybody .270, believe .239, yes .229, go .213, and mind .203.

Twelve additional factors were required to extract 99.99% of the variance. In this analysis, the first factor is interpreted by Iker and this researcher to represent an "establishment zap," to show the ambilivance of blacks, and to show negative feelings about each other.

An interesting result was the manner in which verbalized pauses appeared in the factors. According to the strict rules established by Iker, verbalized pauses would be deleted. However, left in this study, they do load with words reflecting anxiety--not an unexpected result to speech communication researchers.

CONCLUSIONS

As a new procedure for studying self concept, this study was successful in

extracting an indiciation of self concept from verbal communicative behavior. Upward Bound students were shown through their verbalizations to reflect a self concept consistent with what might be hypothesized upon the basis of their known environmental and social backgrounds.

It must be understood, however, that the procedure used here is still experimental. Before this study, WORDS had never been used for multiple speakers. It may be true, logical, and possible, for example, that the factors extracted discriminate speakers rather than themes common to all speakers. However, because of the results obtained, both the viability of research relating self concept and verbal behavior and the utility of WORDS to communication research has been demonstrated. Again it must be indicated that the procedures used are experimental. Investigations strictly using WORDS with multiple speakers, for example, must be performed before the relationship demonstrated here can be accepted as actually resulting from the Upward Bound speakers and not from artifacts of the program itself.

[1] For a more complete development of this hypothesis see Fred E. Jandt, "An Experimental Study of Self Concept and Satisfactions from Consummatory Communication," Unpublished Ph.D. dissertation, Bowling Green State University, 1970.

[2] For a more complete description of Upward Bound programs see Cliff Brooks and Fred E. Jandt, "Self Concepts as Communicators Among Upward Bound Students," The Speech Teacher, 1971, 20, 221-224.

[3] National Industrial Conference Board, Inc., Road Maps of Industry, No. 1540, February 15, 1966.

[4] For example see W.A. Kennedy, V. Van De Riet, and J.C. White, Jr., "A Normative Sample of Intelligence and Achievement of Negro Elememtary School Children in the Southeastern United States," Monographs of the Society for Research in Child Development, 1963, 28, No. 90.

[5] T.F. Pettigrew, A Profile of the Negro American. Princeton, N.J.: Van Nostrand, 1964, p. 113.

[6] W.H. Grier and P.M. Cobbs, Black Rage. New York: Basic Books, 1968.

[7] R. Rosenthal and L. Jacobson, "Self-Fulfilling Prophesies in the Classroom Teachers' Expectations as Unintended Determinants of Pupils' Intellectual Competence," in Social Class, Race, and Psychological Development, M. Deutsch, I. Katz, and A.R. Jensen (eds.). New York: Holt, Rinehart and Winston, 1968, and Pygmalion in the Classroom: Teacher Expectation and Pupils' Intellectual Development. New York: Holt, Rinehart and Winston, 1968.

[8] R.M. Dreger and K.S. Miller, "Comparative Psychological Studies of Negroes and Whites in the United States," Psychological Bulletin, 1960, 57, 361-402, and "Comparative Psychological Studies of Negroes and Whites in the United States: 1959-1965," Psychological Bulletin Monograph Supplement, 1968, 70 (3, Pt. 2).

[9] J.E. Hokanson and G. Calden, "Negro-White Differences on the MMPI," Journal of Clinical Psychology, 1960, 16, 32-33.

[10] R.L. McDonald and M.D. Gynther, "Relationship of Self and Ideal-Self Descriptions with Sex, Race, and Class in Southern Adolescents," Journal of Personality and Social Psychology, 1965, 1, 85-88.

[11] Louise M. Soares and Anthony T. Soares, "Self Concepts of Advantaged and Disadvantaged Youths," Proceedings of the Annual Convention of the American Psychological Association, 1970 (5, Pt. 2), 653-654.

[12] T.F. Pettigrew and D.C. Thompson (eds.) "Negro American Personality," The Journal of Social Issues, 1964, 20, No. 2.

[13] E. Earl Baughman, Black Americans: A Psychological Analysis. New York: Academic Press, 1971.

[14] Grier and Cobbs, Black Rage.

[15] A.J. Prange, Jr. and M.M. Vitols, "Jokes Among Southern Negroes: The Revelation of Conflict," Journal of Nervous and Mental Disease, 1963, 136, 162-166.

[16] The description of WORDS is taken from "Howard Iker's WORDS System for the Analysis of Verbal Behavior" (a videotaped interview conducted by Fred E. Jandt), deposited with the Educational Communications Center, State University College at Brokcport. Also see Howard P. Iker, WORDS SYSTEM MANUAL, dated December 8, 1971, and Howard P. Iker and Norman I. Harway, "A Computer Systems Approach Towards the Recognition and Analysis of Content," Computer Studies in the Humanities and Verbal Behavior, 1968, 1, 134-154. WORDS first use in a speech communication study was a content analysis by Thomas Jonas of an article by Chaim Perelman.

[17] "Bridge" students are those who have graduated from high school and who will enroll in college.

[18] Emanuel M. Berger, "The Relation Between Expressed Acceptance of Self and Expressed Acceptance of Others," Unpublished doctoral dissertation, University of Pittsburgh, Pittsburgh, Pennsylvania, 1950, and Journal of Abnormal and Social Psychology, 1952, 47, 778-782. Berger's seven definitions are based upon Sheerer's which were developed under Carl Rogers' influence. See Elizabeth T. Sheerer, "An Analysis of the Relationship Between Acceptance of and Respect for Self and Acceptance of and Respect for Others in Ten Counseling Cases," Journal of Consulting Psychology, 1949, 13, 169-175.